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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,945	12/19/2001	Jung-Wan Ko	1293.1071D4	9655

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EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
2653	12

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,945

Applicant(s)

KO ET AL.

Examiner

Kim-Kwok CHU

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 9/30/03 (paper 10).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/333,520.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Remarks

1. Applicant's Remarks filed on 9/30/03 (paper 10) has been fully considered.

(a) Applicant states that the prior art of Maruyama "would not appear to disclose setting a single archive flag for more than one particular data file" (page 6 of the Remark, lines 14-16). Accordingly, Maruyama discloses that his archive flag serves to prevent erase errors when a program is recorded on optical disc 10 (column 19, lines 51-54). In Fig. 8, a program (video title set) 72 such as VTS#n consists of a plurality of video files 94 such as VTSl. Therefore, Maruyama's archive flag protects a plurality of files from erase errors.

Claim Objections

2. Claim 15 is objected to because of the following informalities:

(a) in claim 15, lines 7 and 8, the term "with the write protection information" should be changed to --with write protection information--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

4. Claims 1-5, 11, 13 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Maruyama (U.S. Patent 6,385,389).

Maruyama teaches an optical disk having all of the elements and means as recited in claims 1-5, 11, 13 and 14. For example, Maruyama teaches the following:

(a) as in claim 1, a recordable and/or rewritable recording medium 10 to record data; (Fig. 1);

(b) as in claim 1, the data including an entire user data area 28 or at least a plurality of particular data files 26 and 27 (Fig. 1; abstract);

(c) as in claim 1, a Lead-in area 27; a Lead-out area 26; and the user data area 28 (Figs. 2A and 2B);

(d) as in claim 1, wherein upon the finalization for writing on the Lead-in area and the Lead-out area has been completed, the recording medium 10 is set to a write protection

state (Archive Flag) ensuring the protection of the data recorded on the recording medium from unwanted overwriting or erasing (Fig. 17, column 19, lines 50-54; the finalization operation is just a general procedure to close a data section and then updated the table of content in the Lead-in/Lead-out area);

(e) as in claim 2, the recording medium is a disc, satisfying a DVD-R specification (column 5, lines 49 and 50); and

(f) as in claim 3, the recording medium is a bare disc not contained in a case of a cartridge (Fig. 1).

5. Method claims 4 and 5, are drawn to the method of using the corresponding apparatus claimed in claims 1 and 2. Therefore method claims 4 and 5 correspond to apparatus claims 1 and 2 are rejected for the same reasons of anticipation (obviousness) as used above. Furthermore, claim 4 also recites the following limitation which is taught in the prior art of Maruyama:

(a) as in claim 4, checking the state of the recording medium (Lead-in area contains information/state such as disc type, laser power and disc name etc. which are being used to control the proper operation of the recording medium).

6. Claims 11, 13 and 14 have limitations similar to those treated in the above rejection, and are met by the references as discussed above. Furthermore, claims 11 and 13 also recite the following limitations which are taught in the prior art of Maruyama:

(a) as in claim 11, a cartridge 11 having a case which receives the recording medium (Fig. 2A); and

(b) as in claim 13, the case 11 does not have a recognition switch for write protection (Fig. 2A).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (U.S. Patent 6,385,389) in view of Ito et al. (U.S. Patent 6,243,340).

Maruyama teaches a storage device very similar to that of

the instant invention. However, Maruyama does not teach the following:

(a) as in claims 8 and 12, the case 11 has a recognition switch for write protection.

Ito teaches a DVD-RAM disc cartridge 300 having a write protect operating portion 303 (Fig. 3).

Similar to an overwrite prohibit switch in a magnetic floppy diskette, a DVD type recording medium needs a protective case with a write protection switch to prevent data being accidentally overwritten. Hence, when there is a motivation of preventing error writing on Maruyama's recording medium, it would have been obvious to one of ordinary skill in the art at the time of invention to store Maruyama's recording medium in a cartridge such as Ito's, because Ito's case has a write protection switch which can be enable and does not allow data stored in the medium being overwritten.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ro et al. (U.S. Patent 6,288,989) and further in view of Furukawa (U.S. Patent 5,315,578) and Sugimoto et al. (U.S. Patent 5,978,322).

Ro teaches an optical recording medium very similar to that of the instant invention. For example, Ro teaches the following:

- (a) as in claim 15, a recordable and/or rewritable recording medium to record data (Fig. 6);
- (b) as in claim 15, a Lead-in area (Fig. 6);
- (c) as in claim 15, a user data area (Fig. 6, data area is the user data area);
- (d) as in claim 15, a finalization for writing on the Lead-in area (the finalization operation is just a general procedure to close a data section and then update the table of content in the Lead-in area);
- (e) as in claim 15, the recording medium is set to write protection state ensuring the protection of data recorded on the recording medium from unwanted overwriting or erasing (Fig. 6; password is stored); and
- (f) as in claim 15, write protection information being stored in a plurality of locations in the Lead-in area (Fig. 6; a plurality of passwords are stored in the Lead-in area).

However, Ro does not teach the following:

(a) as in claim 15, the write protection information being redundantly stored in a plurality of locations in the Lead-in area;

(b) as in claim 15, a Lead-out area;

(c) as in claim 15, a finalization for writing on the Lead-out area; and

(d) as in claim 15, the recording medium satisfying a DVD-R and/or DVD-RW specification.

Furukawa teaches a disc in which the same data is repeatedly recorded in an ECC (error correction) block (Figs. 1, 2a and 2b; claim 1; error correction of information is done by ECC means 56 in Fig. 4).

Sugimoto teaches a DVD-R type information disk having a Lead-out area (Fig. 9).

Although Ro does not teach that the write protection information is redundantly recorded, this feature is not novel. Backing up or duplicating data is a typical practice for preventing data loss or misread. For example, Furukawa teaches that data is redundantly recorded in different location on a recording medium in case a scratch will cause data loss.

Hence, write protection information such as a password needs a backup or duplicate copy. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to store Ro's data (password) redundantly at

different locations in the Lead-in area as taught by Furukawa, because Ro's write protection information (password) should be duplicated in order to prevent data loss by a scratch or any disk read/write fault.

On the other hand, as in claim 15, the Lead-out area is part of a DVD's information management region. For example, Sugimoto teaches a DVD-R type recording medium having a Lead-out area for recording data such as management information other than user data. Hence, when there is a motivation of storing management data, it would have been obvious to one of ordinary skill in the art at the time of invention to divide an optical recording medium into a Lead-in area, a Lead-out area and a user data area such as Sugimoto's, because the Lead-out area can be used to record disk management data.

Furthermore, the finalization operation of Sugimoto's lead-out area is just a DVD's standard disk management procedure in order to close a data section and then update the table of content in the Lead-out area.

Allowable Subject Matter

10. Claims 6, 7, 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim

11. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 6, the prior art of record fails to teach or fairly suggest a write protection method of a recording medium having the following steps:

(a) checking whether a case is set to a write protection state; and

(b) if the state of the recording medium checked in the checking of the state of the recording medium does not match the write protection state of the case, informing a user of the difference.

As in claim 9, the prior art of record fails to teach or fairly suggest a write protection method of a recording medium having the following steps:

(a) determining whether the state of the recording medium matches the write protection state of the write inhibit hole; and

(b) preventing writing of the new data on the recording medium if the state of the recording medium or the state of the write inhibit hole is set to a write protection state.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

12. Any response to this action should be mailed to:
Commissioner of Patents and Trademarks Washington, D.C. 20231
Or faxed to:

(703) 872-9306 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

102 11/20/03
Kim-Kwok CHU
Examiner AU2653
November 20, 2003

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